Romanian Energy Sector – Privatization is the Key Word for 2004

Central Europe Trust Company Ltd

Introduction

Faced with the need to make the energy markets more efficient and let the strain off their budgets, governments all over the world have had to choose from an array of policy reform options. Privatization is central among them and Romanian policy makers have gone a long way towards restructuring and preparing the companies in the energy sector for the new industry environment. 2004 is seen as the Year of Privatization in the Romanian energy sector with major sell-offs in the power (Electrica Banat, Electrica Dobrogea, Electrica Moldova and Electrica Oltenia, Electrica Muntenia Sud, the power generation complexes in Turceni, Rovinari, Işalniţa – Craiova II), oil (SNP Petrom) and natural gas distribution (Distrigaz North and Distrigaz South) sectors scheduled for completion in 2004.

The privatization of the energy sector is vital to the success of Romania's economic restructuring. The subsidies, losses and bad debts in the energy sector has totaled circa USD 1 billion in the Romanian economy as of 2002 (or equivalent of 2.5% of GDP, still declining from previous year when they've reached 4.8% of GDP).

Romanian Energy Sector – General Facts

During the last decade, the Romanian energy sector experienced dramatic transformations, moving gradually from vertically - integrated state-owned monopolies toward an increasingly liberalized sector on the fast track towards privatization. The reform of the sector has continued at various paces since the beginning of 1990, on the background of a decrease in energy demand caused by the sharp decline of heavy industries (e.g. petrochemicals, fertilizers, metallurgy, machine building, cement, etc). This restructuring process has overlapped with a sustained effort to redefine the legal and regulatory environment of the sector, in order to allow for increased competition and finally for transferring the sector into private hands.

Foreign capital may play a pivotal role in helping the Romanian economy to diversify energy supply, increase utilization efficiency through modernization and reduce environmental impact. Yet the foreign investment in the sector has not been as forthcoming as anticipated, due to the slow pace of reforms.

During the last years the Government's energy policy focused on the restructuring of the state-owned public companies, in parallel with market liberalization and creation of transparent market mechanisms. The effort, although long way from completion, is starting to pay off. The forthcoming privatizations in the oil, gas and power sectors (2004 – 2005) are expected to bring major changes in the structure of the energy sector while boosting investment and efficiency of the newly privatized companies. The privatization of the energy sector is expected to have a significant impact on all other industries; the impact may be painful for those that failed to rationalize their energy consumption and cost structure and were artificially kept alive by quasi-subsidized energy prices or other protective practices.

Traditionally one of the hardcore sectors of the Romanian industry, the energy sector accounts for some 5% of Romania's industrial output and employs ca 6% of the Romanian labor force.

Romania has significant (although insufficient) fossil fuel and hydroelectric resources, and has the potential to become energy self-sufficient in several decades. In fact Romania is closer to energy self-sufficiency than any other country in the region (except for Russia). The currently exploited domestic energy resources can secure an annual production of 6.3 million tones of crude oil, 14 billion m^3 of natural gas, 35 million tones of coal and a hydropower potential that can generate an annual power production of 17,000 MWh. For the first ten months of 2003, Romania's energy demand was supplied based on the following energy carriers (see Exhibit 1), almost two thirds of which are domestically produced.

At the beginning of 2003 there were over 103,000 employees working in the production, transport and distribution of electricity, thermal power, gas and cogeneration. This represents approximately 6% of the total workforce employed in the industry, the sector being the third largest employer after the textile and machine building industries. For the same period, the monthly average gross wage stood at

USD 314/employee, considerably higher as compared to the industry's average of USD 175/employee.

Power Sector

Evolution of Power Sector Restructuring

Back in 1990, the Romanian Electricity Authority (RENEL) was established following the reorganization of the former Ministry of Electrical Energy. RENEL was at that time a vertically integrated state owned company with a monopolistic position in power generation, transmission, distribution and supply as well as a dominant position in heat co-generation. Starting 1992, RENEL's slow reorganization process began and some of ancillary activities were spun-off.

By mid-1998, the Minister of Industry and Trade implemented the first stage of a power sector restructuring process, with the goal of building a competitive power market, based on the unbundling of generation, transmission and distribution. As a result, RENEL was reorganized into several specialized entities (see Exhibit 2). The reorganization of RENEL was accompanied by employment reductions of 10,000 employees in May 1999 and the elimination of the cross-subsidies between industrial and residential electricity prices, on the background of increasing electricity prices to USD 50 per MWh for household users and USD 45 per MWh for industrial users. The nuclear power generation was spun off RENEL and established as a stand-alone100% state – owned regie autonomous.

In July 2000, CONEL was further restructured into four independent joint stock companies namely Transelectrica (power transmission and market operator), Termoelectrica (thermal power and heat co-generator), Hidroelectrica (hydropower generator) and Electrica (power distributor). Simultaneously, the legal and institutional framework evolved allowing for a gradual liberalization of the power market and for the establishment of an independent regulatory body (ANRE).

Generation

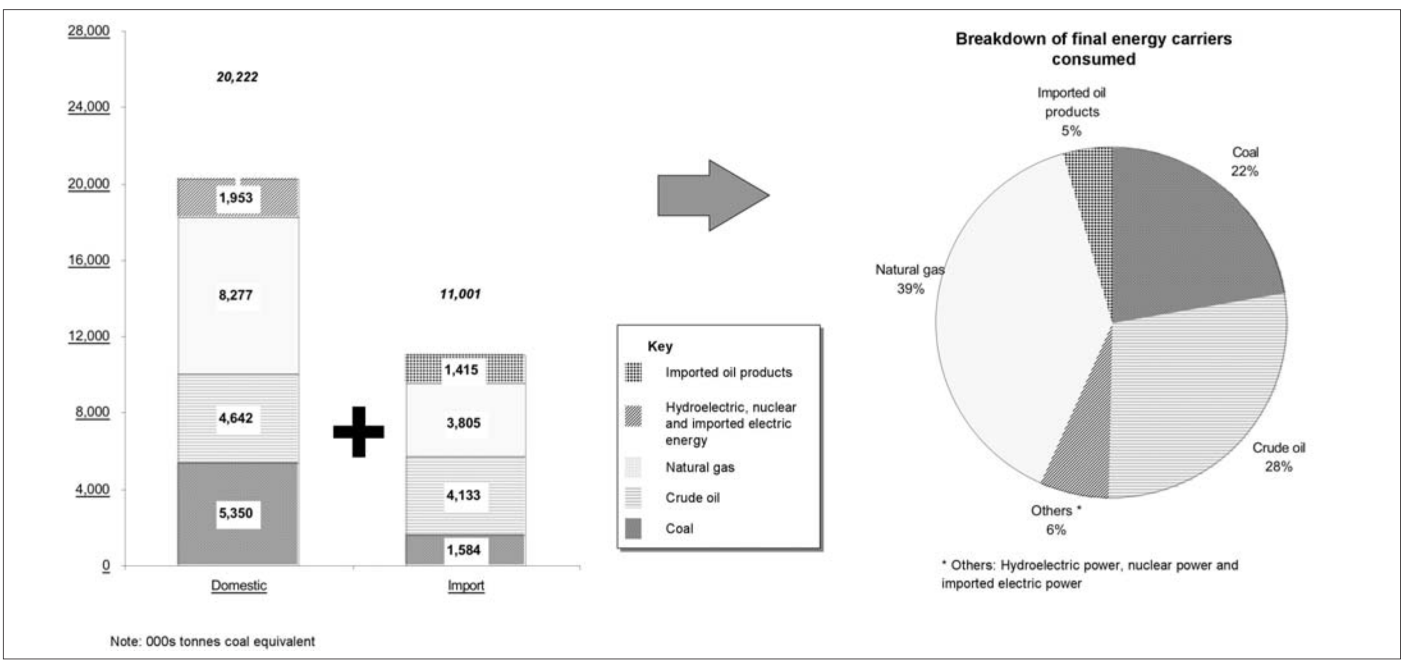
The Romanian power generation industry is still highly concentrated, with three companies ultimately accounting for almost 85% of the energy produced. Termoelectrica, including its fully – owned subsidiaries, is the main producer accounting for 45% of the energy produced (thermal power - 57%), followed by Hidroelectrica (hydropower - 11%) and Nuclearelectrica (nuclear power – 10%). Independent producers and auto-producers account for some 15% of the energy produced.

Further on, a significant number of smaller cogeneration power plants have been spun-off Termoelectrica and transferred for operations to the local authorities, in an attempt of increasing local responsibilities for the efficient heat supply and getting rid of a never ending financial burden to the state budget. The trend has continued with the externalization of several cogeneration thermal power plants supplying large industrial consumers (e.g. CET Govora, CET Midia, CET Galați). Such externalization has proven difficult since most of the local authorities have neither the financial capability nor the technical sophistication to operate such cogeneration capacities; in order to keep them operating during the 2002 – 2003 winter season, the Government had to guarantee for them a fuel purchase loan of USD 120 million, repayable over a 2 years period; the situation has repeated during the 2003 winter.

Historically Romania had an installed power capacity of roughly 22 GW, of which some 73% in thermal-power plants (16 GW) and 27% in hydropower plants. Starting 1996, the first nuclear reactor of 700 MW was commissioned at the Cernavoda Nuclear Power Plant, the total installed power in the system reaching some 22.7 GW. However, out of the total installed capacity, about 26% is not operational (being decommissioned, under conservation or under rehabilitation) leaving the operational installed capacity at roughly 16 GW. Moreover, over 50% of this capacity is over 20 years old and should be immediately decommissioned under normal circumstances. Hence, although the current peak demand is less than half the installed capacity, without investment in rehabilitation and new capacities the power supply may face severe constraints in the near future.

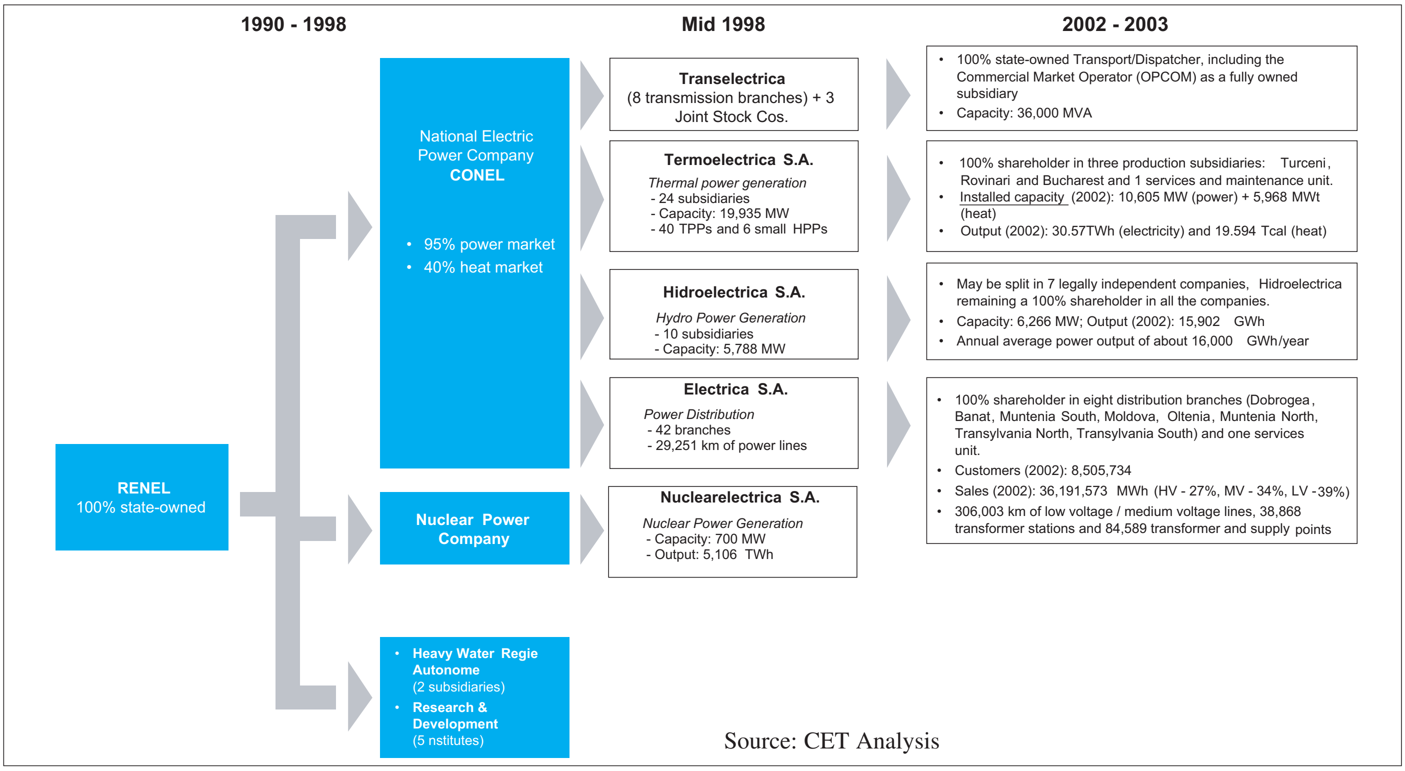
While a competitive power market started to be established and privatization of the power distribution companies progressed, the government will launch the privatization of generation assets. According to the Government's strategy, between 25 – 40% of the thermal power capacities is intended to be privatized between 2004 - 2005 (at a pace of some 2 generation companies each year). The privatization process will be flexible, allowing also partnerships of potential investors with Termoelectrica in order to jointly operate larger generation plants. Some of Termoelectrica's plants will be also available to be taken over partially or fully by potential investors interested in developing co-generation activities. A number of foreign companies have expressed their interest in acquiring thermal power

Exhibit 1 - Breakdown of Final Energy Consumption for ten months, 2003 (000s tonnes fuel equivalent)



Source: National Commission for Statistics, CET Analysis

Exhibit 2 - Evolution of Restructuring the Romanian Power Sector



Source: CET Analysis

plants in order to operate them or as a way to secure supply following a possible acquisition of local power distribution companies.

According to the recent announcement issued by the Ministry of Economy and Commerce in the international media, the first thermal power plants that will be open to foreign investment include Electrocentrale Turceni and Electrocentrale Rovinari, two of the most competitive thermal power plants in Romania, as well as the Craiova energy complex (i.e. Işalniţa and Craiova II). The power plants will be sold in a package deal that will include certain lignite mines and attached railways as well. Potentially interested investors are requested to submit, by January 20, 2004, non-binding expressions of interest for any of the TPPs mentioned above.

Termoelectrica is a 100% state owned company that produces and supplies together with its fully – owned subsidiaries cca. 45% of Romania's electricity demand (55,171 GWh) and 30% of the total heat demand (19.594 Tcal). The share in total power production decreased since 1989 (from 87% to the current levels 45 %) due to the sharp drop in demand and the high price of the power generated in thermal power plants. In addition to this the company operates a 602-km transportation network for distribution of hot water and technological steam in 11 cities. The company holds license from ANRE to produce about 8,433 MW.

The need to further restructure Termoelectrica became stringent due to its continuing losses (ca USD 80 million in 2002 only).

By the end of 2001, Termoelectrica had 19 subsidiaries and one branch, operating some 36 thermal power plants and 5 thermal plants. Electrocentrale Deva was the first company to be spun-off as a 100% Termoelectrica owned subsidiary in 2001 (Govt. Decision 1182/2001). The Company has an installed power of 1,260 MW and burns domestic hard coal. Following GD No 104, 105 and 647/2002 some of the co-generation power plants and thermal plants (which supplied heat to the 11 towns) were spun-off and transferred for free to local public administration leaving Termoelectrica with a 11-subsidiaries structure. The Government went further with the restructuring process and decided to break the company into four regional units as of March 2003 (Government Decision No 1524/2002).

The restructuring included spinning-off Termoelectrica into three production subsidiaries (Turceni, Rovinari and Bucharest) and one services and maintenance subsidiary. Termoelectrica remains a 100% shareholder in the four companies until they will be eventually privatized. The three subsidiaries were:

- *Electrocentrale Turceni S.A.*: based in Turceni has an installed power of 1990 MW and operates on lignite.
- *Electrocentrale Rovinari S.A.*: based in Rovinari, has an installed power of 1320 MW and operates on lignite.
- *Electrocentrale Bucharest S.A.*: based in Bucharest, has an installed power of 2938 MW and operates on liquid fuel, natural gas and lignite. It includes the following branches: Electrocentrale Bucureşti, Electrocentrale Iernut (Mureş), Electrocentrale Constanţa and Electrocentrale Craiova (Işalniţa and Craiova II). The central unit in Bucharest retained one of the worst plants from the system, in order to streamline their operations.

By the end of 2002, the installed power capacity was 10,605 MW while the installed heat generating capacity was 5,968 MWt (of which 5,278 MWt in hot water boilers and 690 MWt in industrial steam boilers).

As is the case with the other companies in the power sector, Termoelectrica is struggling with an obsolete asset base. In fact, over 82% of Termoelectrica's generating capacities are older than 20 years, and 34% older than 30 years! Obsolete technologies (at '60 -'70's level) impact the performance of the company and its subsidiaries, leading to high generation costs, high emission levels (which fail to meet the EU environmental standards) and consequently poor financial performance.

Out of the total installed capacity for electrical power of 10,605 MW, 66% is in condensation plants (6,940 MW) and the balance of 34% is in co-generation plants (3,710 MW), now owned and operated mostly by local authorities or industrial customers. As regards heat generation capacity, over 85% is located in co-generation plants.

In terms of primary energy resources, Termoelectrica burns about 23.1 million tones of lignite, 3.5 million tones of pit coal, 1.7 million tones of fuel oil and 3 billion m^3 of natural gas each year. By fuel type, some 55% of installed capacity uses coal, the balance (45%) using hydro carbonates. The large share of coal-fired capacities, as well as the share of domestic coal in total fuels burnt (over 50% in 2003) reflects the Government's political determination towards encouraging domestic coal consumption as a sustainable option. Coal is supplied from state owned mining companies and the Government establishes the quantity and prices of the coal Termolectrica needs to buy and consume. Around one third of the primary energy resources burnt are imported. Fuel oil accounts for the largest share (16% of total fuels burnt in 2001), followed by natural gas (9.2%) and coal (3.9%). The dependence of imports caused often difficulties in supply due to the lack of necessary hard currency funds.

The situation will change this year when some of the lignite mines supplying the thermal power plants in Oltenia (Turceni, Rovinari, Işalniţa, Craiova II) will be included in newly – formed power generation complexes and privatized as soon as possible. This determined move is targeted towards profitability enhancement of both coal mining and power generation sector.

In terms of investment, Termoelectrica is looking to secure financing for projects totaling some USD 1.7 billion, of which USD 600 million needed only for environmental investment.

Hidroelectrica is the second largest power generator (28% of total power consumption) and the main provider (90%) of technological system services to the National Power System. Hidroelectrica was spun off from Conel and established as a joint stock independent company in 1998 (GD 365/1998). The company is 100% state owned and operates according to GD 627/2000.

Hidroelectrica operates 12 geographical branches (which are not corporatized), each of them operating a number of hydro power plants. All branches are hydrological independent (control of the water flow through one branch does not affects the water flow availability for another branch). The company manages a total of 6,052 MW of installed hydropower capacity in 127 hydropower plants (with 297 hydro-generators) and 222 micro hydro-power plants, and has an annual average power output of about 16,000 GWh. Lakes include a total water volume of 10 billion m^3 and are located on 21 rivers. The output is strongly influenced by the weather and can range from 18,500 GWh in a rainy year to close to 10,000 GWh in a droughty year. Last year Hidroelectrica produced about 15,902 GWh, 2002 being the best year in the last decade in terms of lakes filling degree (62%). The Iron Gates HPPs I and II accounted for over 47% (7,439 GWh) of the total power produced by Hidroelectrica, benefiting from an extremely high flow of the River Danube.

Apart from the existing capacities, there is a significant hydro capacity currently at various stages of completion, for most of them the works having started before 1989. While the most advanced projects will be completed by Hidroelectrica under a BOT scheme, the remaining projects (some 21 projects including 36 hydropower plants) were offered for completion to interested investors by the Ministry of Industries and Resources; these require an estimated investment effort of some USD 1.3 billion. Expressions of interest have been received so far from Electricite de France, Union Fenosa, ENEL, RWE, Itochu, Toshiba and Kansai (Japan), Tahal (Israel), Mecamidi (France), VA-TECH Hydro and Voith Siemens Hydro Power Generation GmbH (Austria), but the projects failed to materialize so far.

Hidroelectrica is also a power exporter, the export activity being considered vital for the continuation of the modernization and investment program (e.g. modernization works at Iron Gates I and II, Bicaz, Lotru, etc). In 2003 the exports were reduced due to severe drought which negatively impacted the amount of power produced by the Company.

Nuclearelectrica is the third largest power producer, accounting for some 10% of Romania's total power consumption. The Company operates the Cernavoda nuclear power plant (consisting of 5 CANDU units out of which only one completed and operating) and the nuclear fuel plant in Piteşti. Only Unit I is currently operating (commissioned in 1996) at a capacity of 700 MW, the other four units being in various stages of completion. In 2002, the net nuclear power supplied to the system was 5,106,225 MWh.

The completion of the Unit II (40% completed) has been recently (December 2002) financed through a mix of manufacturer supplier credit, Romanian state budget contribution and a Societe Generale loan. The total value of the project will amount to USD 820 million, (half of it being covered by the Romanian government). Discussions are relatively advanced also for financing the completion of the Unit III (which is 16 % completed) through a PPP arrangement aimed at attracting USD 1 billion. The other two units (IV and V) are only 5% respectively 4% completed, an eventual completion not being taken into account on medium term.

Transmission

Transelectrica is the Transmission System Operator (TSO) for the entire Romanian Power System and is responsible for safe and efficient operation of the power system and of the wholesale power market. Transelectrica is a 100% state owned joint-stock company and will not be privatized as it is considered a strategic asset and operator. OPCOM, a fully owned subsidiary of Transelectrica, plays the role of electricity market administrator dealing with processing of electricity orders and offers from market participants, analyzing the bids and determining the priorities of power units loading.

Transelectrica operates and maintains the national high and very high voltage transmission network. The Romanian power transmission network consists of 7,900 km of very high voltage (750 kV) and high voltage lines (400 kV, 220 kV) as well as 110 kV interconnection lines with neighboring countries and 77 transformer substations. The overall installed capacity that can be transported is 36,000 MVA. Generally, the power flows are from West to East and from South to North, reflecting the location of the generation capacities (e.g. large thermal power plants in the South near the coal mines and large hydro-power plants in the South-West).

Romania has the following international interconnections: Ukraine (750 kV and 400 kV), Bulgaria (750 kV, 400 kV and 220 kV), Serbia & Montenegro (400 kV and 110 kV x 3), Moldova (110 kV x 3) and Hungary (110 kV). There are only two synchronous connections with Bulgaria (used only for emergency situations, no power flows being currently transferred) and Serbia & Montenegro (used mainly for exports). Hungary, Moldova and Ukraine are outside the European

Branch	110 kv lines (km)	MV lines (km)	LV lines (km)	Transformer stations (110/MV and MV/MV (pcs)		Transformer and supply points (pcs)	
Moldova	2,688	16,903	30,250	134	4,185	10,010	3,009
Dobrogea	2,135	11,411	10,062	205	4,980	5,776	3,466
Muntenia South	2,155	15,873	21,625	206	5,455	9,138	3,174
Oltenia	4,035	20,035	27,224	247	6,981	10,223	3,259
Banat	1,954	13,614	18,342	140	4,734	6,813	2,068
Transilvania North	2,245	14,090	22,282	124	3,860	7,174	2,624
Transilvania South	2,333	12,694	19,142	106	3,742	7,032	2,300
Muntenia South	785	13,098	21,028	60	3,710	5,588	2,934
Total Electrica	**18,329**	**117,719**	**169,955**	**1,222**	**37,646**	**61,754**	**22,835**

Source: Electrica

synchronous area (UCTE), the exchanges with these countries being carried using the "island" approach (one demand area is isolated from the system and then synchronously connected with the other system). After passing all technical tests it is expected that Romania will join the UCTE system in May 2003, with a direct effect on competition between producers. Starting February 2003 the Romanian power system is interconnected with the Greek, Serbian, Macedonian, Albanian, Bosnian and Bulgarian power systems. It is estimated that in 2 – 3 years, after the full interconnection between areas I and II within UCTE is completed, Romania's transport capacities will double.

Distribution

Following RENEL's corporatization back in 1998, Electrica operated the power distribution and supply infrastructure in the country. Upon separation from CONEL in 2000, Electrica implemented a reorganization plan that consolidated its 42 power distribution regional branches, initially into 19 branches and then into 8 power distribution regions (as of August 2001) based on the eight regions identified in the Government's Green Book regarding regional development. The eight regional subsidiaries were corporatized in a process that started in December 2001 and was finalized by mid 2002, thus completing the final step needed before privatizing the first two distribution companies (Dobrogea and Banat).

Electrica manages a large distribution infrastructure consisting of 306,003 km of high, medium and low voltage lines, 1,222 transformer stations and 61,754 transformer and supply points. Moldova and Oltenia enjoy the most developed distribution infrastructure among the eight branches. One characteristic of the Romanian distribution network is the high internal technological consumption, which stands for some 12.8% of power purchased (5,731 GWh). Oltenia and Muntenia South account for the largest internal technical consumption among the eight branches (over 1,000 GWh each in 2001), followed by Muntenia North (some 850 GWh). The other branches have smaller internal technical consumption (at some 450 – 550 GWh / year).

Electrica provides distribution and supply services to some 8.5 million customers differentiated into three main categories: residential (7,896,651), large industrial (9,153) and small industrial (599,930). Despite the fact that residential customers represent 92% of total customers, they account for only 20% of total power sales. As of September 2003 the average power price to final consumers was USD 58.4/MWh (USD 74.3 /MWh for residential consumers and USD 54.4 for industrial consumers).

In 2002 Electrica recorded sales of 36,191,573 MWh; broken down by voltage the sales were split as follows: high voltage – 27% (9,746,011 MWh), medium voltage - 34% (12,243,133 MWh) and low voltage 39% (14,202,429 MWh). During the last decade the high and medium voltage power sales recorded a steady decline due mainly to the decline in industrial output as well as to closure of several bankrupt industrial plants. On the other hand, the low voltage consumption increased steadily driven by increased consumption of small customers (e.g. SMEs) as well as increased residential consumption.

Electrica Banat covers four counties (Timiș, Hunedoara, Caraș Severin and Arad) and in 2002 serviced 841,329 consumers of which 774,422 residential, 66,189 small and medium and 718 large industrial. Although Timiș has the highest residential consumption, Deva accounts for roughly 40% of Banat's power consumption thanks to its industrial base. On the downside Deva also accounts for over 60% of Banat region's receivables, reflecting the poor collection rates with large industrial consumers. In 2002 Electrica Banat recorded sales of 3,587,542 MWh (10% of Electrica's total sales) and sales of ROL5,959 billion.

Exhibit 3 - Key Indicators For Electrica's Branches (2002)

Branch	No of Customers	Sales in 2002 [MWh]	Residential consumption[1]
Oltenia	1,362,343	6,828,043	14%
Moldova	1,304,826	4,058,332	23%
Muntenia North	1,221,128	6,379,079	15%
Transilvania North	1,089,192	3,845,622	24%
Muntenia South	1,064,986	4,292,721	32%
Transilvania South	1,028,931	3,855,579	22%
Banat	841,329	3,587,542	24%
Dobrogea	593,000	3,344,655	19%
TOTAL	**8,505,734**	**36,191,573**	**21%**

[1] As % of total sales
Source: Electrica

Electrica Dobrogea covers four counties (Constanța, Ialomița, Călărași and Tulcea) and in 2002 serviced 593,000 consumers of which 538,634 residential. In 2002 Electrica Dobrogea recorded sales of 3,344,655 MWh (9% of Electrica's total sales) and sales of ROL5,383 billion. Constanța is the largest county both in terms of sales (two times larger as compared to any other county in the region) and number of residential and large consumers. Slobozia also benefits of a large industrial consumers base, similar to Constanța.

Electrica Banat and Dobrogea were the first two power distribution companies that were put for sale in a pilot privatization program by the Ministry of Industry and Resources under BNP Paribas advisory. Four companies BKW Energie AG (Switzerland), EVN AG (Austria), Enel (Italy) and PPC (Greece) were shortlisted but only Enel has eventually submitted an indicative bid. Consequently the negotiations started with Enel and the Italian company is expected to submit the final binding offer by the March 8, 2004. The privatization agreements are expected to be concluded by the end of Q1 2004. The privatization method selected is a direct sale of 24.62% of equity followed by a capital increase giving the strategic investor 51% of the final equity. About 10% of the equity is earmarked for management and employees.

Electrica Muntenia South covers Bucharest and two other counties (Giurgiu and Ilfov) and in 2002 serviced 1,064,986 consumers of which 1,016,786 residential, 46,675 small and medium and 1,525 large industrial. In 2002 it recorded sales of 4,292,721 MWh (12% of Electrica's total sales).

The attractiveness of this branch is the concentration of a large base of residential consumers (residential consumption accounts for 32% of the branch, much higher as compared to Electrica's average of 21%) as well as a dynamic base of small and medium enterprises. Following diminishing interest from RWE to establish a JV with Electrica Muntenia South (due to a freeze of investments abroad), Electrica's officials stated that Electrica Muntenia South will be privatized through a direct negotiation process instead of through formation of a JV with a strategic player.

Electrica Oltenia covers seven counties (Teleorman, Dolj, Mehedinți, Argeș, Valcea, Olt and Gorj) and in 2002 serviced 1,362,343 consumers, of which 1,263,438 residential, 97,522 small and medium and 1,382 large industrial. Electrica Oltenia is the largest Electrica's branch both in terms of number of customers and power sales. In 2002 Electrica Oltenia recorded sales of 6,828,043 MWh which represents about 19% of Electrica's total sales. Residential consumption accounts for only 14% of Electrica Oltenia's sales (as opposed to Electrica's average of 21%), reflecting a significant base of industrial consumers which is located mainly in Dolj and Argeș counties.

Electrica Moldova covers 6 counties (Bacău, Botoșani, Iași, Neamț, Suceava and Vaslui) and in 2002 serviced 1,304,826 consumers of which 1,213,297 residential, 90,753 small and medium and 776 large industrial consumers. In 2002 it recorded sales of 4,058,332 MWh, representing 11% of Electrica's total sales. Bacău accounts for about one third of the branch's sales, followed by Iași and Suceava.

Electrica Oltenia and Electrica Moldova are scheduled to be launched for privatization during the first quarter of 2004, under joint advisory from Banc of America Securities and Central Europe Trust Company Ltd. (UK). The privatization agreement is expected to be concluded by the 3rd quarter in 2004.

Electrica Muntenia North covers six counties (Galați, Prahova, Brăila, Buzău, Dâmbovița and Vrancea) and in 2002 serviced 1,221,128 customers of which 1,140,904 residential, 78,648 small and medium and 1,576 large industrial. In 2002 it recorded sales of 6,379,079 MWh (18% of Electrica's total sales), the branch being the second largest after Electrica Oltenia. The consumption is driven by the developing Prahova region, as well as by the privatized metallurgical plants in Galați and Targoviste.

Electrica Transilvania North covers six counties (Cluj, Bihor, Sălaj, Bistrița Năsăud, Satu Mare and Maramureș) and in 2002 serviced 1,089,192 consumers of which 1,009,391 residential, 78,715 small and medium and 1,086 large industrial. In 2002 it recorded sales of 3,845,622 MWh (11% of Electrica's total sales), large industrial consumers accounting for some 60% of total sales.

Electrica Transilvania South covers six counties (Sibiu, Brașov, Alba, Harghita, Covasna and Mureș) and in 2002 serviced 1,028,931 consumers of which 939,779 residential, 88,183 small and medium and 969 large industrial. In 2002 it recorded sales of 3,855,579 MWh which represents some 11% of Electrica's total sales. The consumption is driven by the Brașov and Sibiu regions, two counties that are experiencing strong industrial base and tourism.

Institutional and Legal Framework for the Power Sector

The institutional and legal framework for the electricity sector was redefined in 1998 with the creation of the National Power Regulatory Authority ("ANRE") and the passing of the Energy and Heat Government Emergency Ordinance (No 63/1998). The Energy and Heat GEO was the basis for creating a competitive energy market in Romania and followed the principles of EU Directive 96/92. The GEO covered key areas such as third party access, competition, licensing and the regulatory body. Following the evolution of the power sector the regulatory framework needed to be amended in order to provide clarity as regards to structure of the energy market and tariffs, concession and licensing regime, regulatory body, etc. Consequently a new Energy Law (No 318) was passed in August 2003. The new law marks, at regulatory level, the distinction between the electricity and thermal power produced in co-generation and the thermal power that is not produced in co-generation. The law covers important issues in the sector such as power strategy and policy, the regulatory body, the expropriation and concession regime of land, the power market, tariffs and prices or renewable energy.

In order to strengthen investors' comfort in investing in the energy sector, the Government issued an Energy Road Map, fully endorsed by all parliamentary parties, which highlights te main directions and strategies for the sector. Such Road Map is expected to remain valid and to be persistently applied by any Romanian Government, no matter what its political orientation may be.

ANRE is an independent regulatory body under the Government's supervision which is responsible for issuing secondary regulations in fields such as tariffs, dispatching regulations, Commercial Code for wholesale market, framework contracts for distribution and supply or licensing procedures. ANRE has issued key regulations in all of the areas mentioned above and has created the legislative framework for initial power market liberalization. Specifically, ANRE opened up 10% of the Romanian electricity market in February 2000 by allowing ten large companies to select their power suppliers and granting power supply licenses to five independent electricity producers. The remaining 90% of the market remained regulated under the supervision of OPCOM. In October 2000, the competitive market was increased to 15% of demand, allowing additional companies to select their electricity suppliers. On January 1, 2002, the free market was expanded to 25% and on February 2002 to 33%. According to the calendar set in the Roadmap for the Energy Sector, full market opening is scheduled for industrial consumers by January 1st, 2007, while residential consumers will enjoy full market opening by July 1st, 2007.

Oil Sector

Exploration and Production

Romania has been a long-established oil producing country with an oil industry that dates back in 1857, when the first modern oil well was drilled. Since then, about 5,604 million barrels (713.68 million tonnes) of oil have been produced.

Romania has domestic reserves of crude oil both on-shore and in the Black Sea. So far, exploration has targeted shallower horizons, while 3D seismic profiles have been used mainly for offshore exploration. During the last ten years several exploration and production sharing / concession agreements were concluded by the National Agency for Mineral Resources with companies such as Shell, Amoco, Enterprise Oil, Ramco, Forest Oil, Tullow, Sterling, Centaur, TotalFinaElf, Wintershall, Pannonian, as well as with incumbents SNP Petrom and Romgaz. Since 1990 roughly USD 370 million were invested in exploration works in Romania, USD 212 million by foreign companies. Despite this amount of investment however, the new discovered reserves replaced only 20% of the consumption in the last 20 years. SNP Petrom accounts for the largest share of exploration works undertaken. The Company has proven/developed reserves of more than 76.43 million tonnes of crude oil and 66.82 billion m^3 of natural gas, located in 236 commercial fields.

Before 1989, the oil and gas sector operated as an integrated state owned monopoly, the focus being on meeting the "planned" production targets rather than balancing supply and demand. Consequently, the oil production rose to a historical high of some 15 million tonnes in 1976 but afterwards started to continuously decline. The declining trend stopped in 1992, and currently the crude production has stabilized at some 6 million tonnes/year. According to the Government's strategy, the domestic crude production will continue its slight declining trend, reaching 5.57 million tonnes by 2010.

SNP Petrom is the sole Romanian producer of crude and the largest Romanian national corporation. The Company had a market capitalization of USD 1.4 billion (by mid May 2003) and the 2003 forecast for turnover and net profit are at USD 2.01 billion and respectively USD 50.9 million. In 2002 the company produced 5.8 million tones of crude from 252 commercial fields and 9,500 wells (with depths between 120 and 5,500 m). This represents some 50% of the total crude processed by Romanian refineries in 2002, the balance up to 11.5 million tonnes being imported. With GD No. 655/2002, the Romanian Government approved the Strategy for the Romanian Oil Industry for 2002 - 2010. The strategy provides for the main strategic objectives, proposed actions and corresponding investment in the oil industry. The estimated cost of implementing the actions needed to meet the strategic objectives in the E&P sector amounts to USD 1.575 billion and shall be financed out of incumbent companies' own cash flow, fresh capital attracted as well as from foreign loans without governmental guarantees.

Refining and Petrochemicals

Romania's refining sector consists of ten refineries with a total operational capacity of 22.8 million tonnes: Arpechim, Petrobrazi and Petrolsub (SNP Petrom), Petromidia and Vega (Rompetrol), Petrotel (Lukoil), Rafo (Imperial Oil), Astra Romana (Interagro) and Steaua Romana (Omnimpex). In 2002 the refining sector processed a total quantity of 11.5 million tonnes of crude, resulting in an average capacity utilisation rate for the sector of 50%.

After 1989 the crude processed quantities decreased continuously, reaching 10.1 million tonnes in 1999. The trend reversed in 2000, when crude processed volumes increased by 6% reaching 10.7 million tonnes, and maintained in 2001 (11.6 million tonnes) and 2002 (11.5 million tonnes). According to Government's strategy this quantity is expected to reach 14 million tonnes by 2005, following resuming of operations at Petrotel Lukoil and Rafo refineries, coupled with growing GDP and consequently demand.

Company	Refinery	Location	Capacity (million tonnes) Installed	Operational	Nelson index	Output 2001 (million tonnes)	Utilization (%)
PETROM	Petrobrazi	Ploiești	7.50	4.50	11.7	3.50	78%
	Arpechim	Pitești	7.00	3.50	9.4	2.87	82%
	Petrolsub[1]	Suplacu de Barcău	0.45	0.40	2.5	0.14	35%
LUKOIL	Petrotel	Ploiești	5.00	4.70	10.73	1.20	26%
ROMPETROL	Petromidia	Midia	5.30	4.80	8.69	2.57	54%
	Vega	Ploiești	0.80	0.45	1.9	0.18	40%
RAFO	Rafo	Onești	5.20	3.50	9.54	0.27	8%
	Rafinaria Dărmănești	Dărmănești	1.15	0.60	5.49	0.17	28%
INTERAGRO	Astra	Ploiești	1.00	0.7	4.52	0.58	83%
OMNIMPEX GROUP	Steaua Română	Câmpina	0.60	0.36	3.52	0.12	33%
TOTAL			**34.00**	**22.88**	**-**	**11.6**	**51%**

Gasoline and diesel account together for some 70% of the total fuels produced. While EURO gasoline (EN 228) and EURO diesel (EN 590) accounts currently for only 8% and 12% respectively of the total gasoline and diesel output, according to the sector strategy they shall reach 63% of total output by 2005. Currently about 57% of the gasoline and 61% of the diesel is sold on the domestic market, the balance being exported. By 2005 it is expected that sales on the domestic market will increase for gasoline and diesel, reaching 68% and 64% respectively.

Historically the domestic/imported crude split was evenly distributed, with domestic quantities being slightly larger than imports. However it is expected that imports will increase their share in total crude processed as the domestic resources gradually deplete, reaching 57% by 2005 and 60% by 2010.

The evolution of refined products output recorded a decreasing trend until 1999, due to economic recession and contracting market demand. The output picked up again in 2000 and in 2001 reached some 11 million tonnes. Fuels and lubricants accounted for about 90% of the total refined products output, the balance being represented by inputs for the petrochemical sector. According to Government's strategy, it is estimated that the refined products output will reach some 13.74 million tonnes by 2005, of which 12 million tonnes fuels and lubricants and 1.7 million tonnes inputs for the petrochemical sector.

Only some 10% of refineries' output is represented by inputs to the petrochemical sector. In 2001 the feedstock amounted to some 1.003 million tonnes and it is estimated that by 2005 it will reach 1.7 million tonnes.

Five out of the ten refineries have a relatively large installed and operational capacity, sharing the following characteristics:

- The equipment is relatively modern being commissioned between 1960 – 1980;
- The Nelson complexity index (between 8 and 12) and the secondary processing capacity is comparable to Western European refineries;
- The operating and economic performances are lower as compared to recent last generation refineries;
- They have integrated petrochemical installations which use as feedstock refineries' output.

SNP Petrom owns two of the most important Romanian refineries (Petrobrazi Ploiești and Arpechim Pitești) with a total operational capacity of 8 million tones / year. Both refineries have high complexity Nelson indexes (comparable to Western European refineries) and are located in the Southern part of the country, close to the oil fields operated by SNP Petrom and near the major market of Bucharest. In 2001, these combined refineries accounted for 35% of the sector's operating capacity and processed 55% of the total crude. Arpechim is an integrated refining and petrochemical complex which can process both domestic and imported crude, in 2001 the domestic/import split being 60/40. It is a high complexity configuration refinery consisting of two refining trains and a petrochemical plant, commissioned between 1970 and 1983. The refinery produces a range of fuels mainly sold on the domestic market (83%); about 15% of the gasoline and 30% of diesel is exported. Petrochemicals output is mainly olefins-based products (ethylene, propylene, polyethylene, acrylonitrile, carbon black, etc), while feedstock consists of naphtha (87%), propane, n-butane and ethane.

Petrobrazi (Ploiești) is an integrated refining and petrochemical complex located to process both domestic and imported crude, in 2001 the domestic/import split being 90/10. The high complexity configuration refinery consists of two refining trains and a petrochemical plant (consisting of two aromatics extraction lines), commissioned between 1967-1988; Currently only one refining train and the maleic anhydride units operates. The petrochemicals output is mainly aromatics-based products (phenol, acetone, maleic anhydride, etc) while feedstock consists of propylene and n-butane (generated in the refinery) and benzene (supplied from Arpechim).

The Russian company **Lukoil** is one of SNP Petrom's main competitors on the refining market. The company acquired the controlling stake (51%) in the Ploiești based refinery Petrotel back in 1997 for USD 51m. The total value of the deal amounted to USD 300m and included investment commitments of USD 189m, environmental investments of USD 11m and debt assumed by the buyer. Following privatization the Russian company upgraded its facilities, built a small crude terminal on the river Danube, nearby Brăila-Galați free trade zone and developed the distribution network. Recently Lukoil received a significant financial support from the Romanian government, which exempted the company from paying penalties associated with its overdue debts to the budget (almost USD 3 million) and granted a five-year rescheduling for excise and VAT debts. At the same time, the Government has written off a USD 53 million debt owed by Petrotel to the budget, inherited by the company at the privatization moment. The debt issue was a tight negotiation subject between Lukoil and the Government, and the company threatened that it would withdraw from the Romanian market if it doesn't receive a favorable settlement. Starting April 2002 the refinery has been closed for 18 months for upgrading in an USD 160 million capex program.

In November 2000 the Romanian private company **Rompetrol Group** acquired from the State Ownership Fund a controlling interest in Petromidia refinery, located at the Black Sea. Rompetrol paid USD 50 million for 69.9% and assumed the debt of the company amounting to USD 340 million; on top of this, Rompetrol also committed to invest USD 200 milion over the next five years. Following several capital increases Rompetrol reached a 83% interest in Petromidia. Rompetrol also owns the majority interest in Vega, a small refinery based in Ploiești and acquired before Petromidia. In 2001 Rompetrol's combined refineries processed 2.75 million tonnes of crude, 90% of which it was imported. In 2002 the company processed 3.2 million tones of crude, (about 70% of the output being exported) and the company estimated that it will process some 3.8 million tones in 2003. In October 2002 the Austrian group OMV has acquired a 25.1% equity interest in Rompetrol as part of their regional expansion strategy.

Due to the fact that Rompetrol failed to observe the debt repayment schedule the Ministry of Finance threatened to force the company into bankruptcy. Eventually, following negotiations with the MoF, Rompetrol settled the issue in a debt-for-equity swap. As a result 35% of the shares in the Petromidia refinery will go back to the Romanian state.

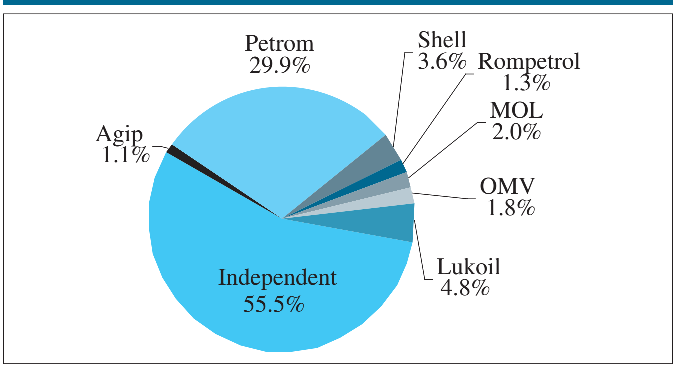
Following several unsuccessful privatization attempts, the **Rafo** refinery was eventually acquired by the Romanian company Imperial Oil in October 2001. Imperial paid USD 7.48 million for the 59.961% stake and subsequently increased its interest in the refinery to 94.5% in a USD 11.5 million deal. The total value of the deal amounted to USD 93.3 million, of which investment commitment amounts to USD 81 million. Imperial also owns the smaller Rafinaria Darmanesti that it acquired in early 2000. After an extremely low activity in 2001, the refinery is currently operating at some 80% capacity utilization producing mainly EURO3 gasoline. About 70% of the output is exported. However low utilization and huge overdue debt to SNP Petrom (for crude processed) eventually forced Rafo near bankruptcy. Although the company was in discussions with the Romanian energy group Tender for a potential takeover, the deal failed to materialize and eventually Tender announced that will not go ahead with the acquisition.

Overall, the Romanian refining industry is operating under its potential. A significant number of refineries are processing imported crude, while exporting fuel products. Further, much of the industry is operating at low capacity utilization and with low share of value-added products, which negatively impacts the profitability of the operations by driving up the fixed costs per ton. Thus we consider that some of the existing capacities may close in the medium term, the most exposed to such moves being the smaller refineries and those with a more unfavorable crude supply situation. Closure of some domestic capacity would likely bring benefits to the surviving players, as it would drive overall operating rates up, and hence enhance industry's profitability.

Downstream

The distribution and marketing of refined products is fully liberalized and open to competition. Competition in this sector has increased significantly, particularly since 1994. SNP Petrom is the retail market leader accounting for 60% of the gasoline sales and almost 31% of the total number of gas stations. Other important players include Lukoil, Shell, MOL, OMV, Rompetrol and Agip. Although unbranded private gas stations account for about 57% of the total number of gas stations are, they account for only 20-25% of total fuel sales in the distribution sector.

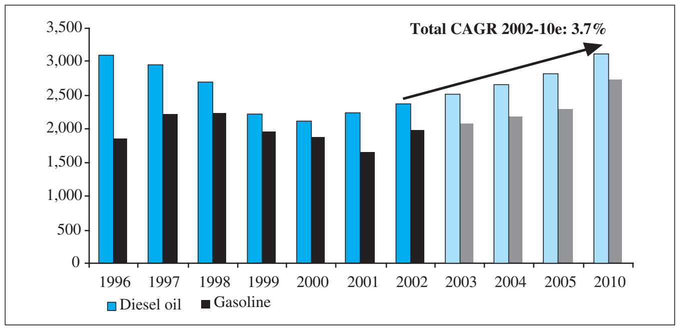
Number of gas stations by ownership



Source: Companies information, CET Analysis

The Romanian retail market is under transition, with modern stations networks rollouts under way. The position of SNP Petrom on the domestic fuel retail market is challenged by Rompetrol, MOL, OMV and Lukoil, which have all revealed plans to invest tens of millions of dollars in expanding their gas station networks. Shell and Agip are the only international companies stating that they are not planning any further increase in the number of stations this year. According to the official estimates, the sales of gasoline are estimated to reach 2.3 million tonnes and sales of diesel 2.8 million tonnes by 2005, thus reflecting a significant growth potential in the industry.

Gasoline And Diesel Oil Consumption (000s tones)



Source: Ministry of Industries and Resources

SNP Petrom is the retail market leader both in terms of number of gas stations and sales. The company operates currently 690 gas stations (almost six times the number of its closest competitor's – Shell) and accounts for some 50% of the total gasoline and diesel sales. SNP Petrom enjoys a strong national brand and an increasingly modernized network that complies to the EU environmental standards.

Petrom's network of retail stations includes 605 selling automotive fuels plus 85 smaller stations selling household fuels. Between 1998 – 2002 the company modernized 191 stations, with about 20 stations currently closed for upgrades and 45 new built. Thus about one third of the current retail network of gas stations has been very recently built or upgraded. The company has an ongoing programme of modernization through new stations and refurbished ones amounting to 40 to 45 sites each year through 2006. However such upgrading will not be carried for all stations, the company considering sales and location factors before starting any new upgrades (e.g. about one third of the stations collectively account for some 3% of the total volume sales and most likely they will receive no new investment). In line with its strategy, Petrom is building new gas stations and selectively modernize the older sites; the new stations have clear branding, modern forecourts and offer a broad range of products and auxiliary services.

The sales increased by 21% in 2002 compared to 2001 mainly due to an increase of 148% in exports of refined petroleum products offset by a decrease of approximately 20% in domestic sales of refined petroleum products. Gasoline sales reached 1,880 million tones (as compared to 1,447 million tones in 2001), while diesel sales amounted to 2,235 million tones. Petrom's market share of gasoline and diesel sales decreased during the first three quarters of the year 2002, especially those of diesel fuel. This is mainly the result of the Company's policy of encouraging exports of refined petroleum products thereby leaving fewer quantities of refined petroleum products available for sale in the domestic market. Another reason was the increase in Petrom's pump prices during 2002 which further deterred domestic sales.

Shell was among the first international oil companies to start building a gas stations network in Romania. During last decade Shell invested over USD 110 million in its retail distribution, reaching a network of some 83 gas stations. However the company announced in 2002 that due to unpredictable market environment, it will put on hold its local development plans. The investment in 2002 did not exceed USD 5 million and was directed towards diversifying the range of fuels and the services provided at the existing gas stations. In 2001 the company recorded a turnover of USD 88 million. Shell Romania SRL owns 13% of the fuel distribution market, ranking second, while Shell Gas Romania (joint venture: Shell 56% - SNP Petrom 44%) controls about one third of the dynamic domestic LPG market.

Lukoil has entered the retail market in 1999, two years after it acquired the Petrotel refinery. The company currently operates close to 110 gas stations and announced ambitious investment (USD 130 million), planning to reach 200 – 250 gas stations by the end of 2004. The fuel is supplied exclusively out of Lukoil's group of companies (from Petrotel or imported from the Burgas or Odessa refineries). The company estimated sales of USD 80 million in 2002, up from USD 28 million in 2001.

Rompetrol operates a network of 38 gas stations which are company owned and branded. In addition to that the company stated that it is the sole supplier to another 100 stations via its franchise system. Rompetrol is competing on prices and well-placed locations rather than on extensive convenience stores and services offered and is following closely Petrom's retail prices. Rompetrol has built fuel storage facilities in Craiova and Arad and plans to establish a wholesale storage system that will cover the whole national territory. Following OMV's acquisition of some 25% of Rompetrol's equity it is obvious that the two players will have to consolidate their downstream activities and branding.

MOL investment in retail operations started in 1995 and in 1997 it was accelerated with the purchase of Amoco's startup operations. The company has currently 46 gas stations (of which 42 owned and 4 under franchise agreements) and has invested over USD 82 million in Romania. For 2002, the company estimated a turnover of USD 70 million, 20% higher as compared to the previous year. A strong lubricant wholesale business is also supporting the brand. After initial expansion a new strategy was defined in 2000. MOL stated its intentions to become the second largest player after SNP Petrom during the next ten years, reaching a 10% market share. The company aims to build some 8-10 new stations each year in order to reach 100-120 gas stations by 2010. The investment focus will be on the Western Romania and the Bucharest areas. The average cost for building a new station is estimated at some USD 0.7-1.2 million (the price of the land not included).

OMV entered the retail market in 1999 and invested so far EUR60 million, doubling each year the number of gas stations. At the end of 2002 the company owned 42 gas stations across the country. So far OMV acquired 8 gas stations from private operators and there were rumors that it may take over Agip's gas stations network in Romania. OMV estimated that would reach sales of EUR130 million in 2002, three times higher as compared to 2001 (EUR39 million). The company stated its objective to become the second largest player in the retail market by 2007. It plans to invest EUR100 million during the next five years and to reach 110 gas stations, corresponding to a 15% market share. OMV was the first company to sell EURO3 gasoline in Romania back in May 2001, supplied from its own refinery in Austria

The Italian operator **Agip** operates currently 25 gas stations, of which 17 are owned and 8 are under franchise agreements. In 2002, the company planned modest growth (some 3-6 gas stations, all of them under franchise agreements) in line with its policy. The company has adopted a wait-and-see strategy and there were rumors that it may sell its domestic operations. For 2002, the company estimated sales of EUR40 million.

SNP Petrom Privatization Overview

After a failed attempt of privatization back in 1998, the Romanian Government re-launched the company for privatization in 2002 under the advisory of a CSFB – ING Barings led Consortium. The Consultant has submitted to the Government the privatization strategy by mid May 2003. The privatization method selected consist of an offering of 51% of the shareholding in SNP Petrom to a strategic investor that will be implemented as follows:

- The sale of 12,580,689,954 existing shares by the Romanian State representing 33.34% of the existing share capital; and
- A capital increase and the payment by the strategic investor for newly issued shares to allow the strategic investor to hold 51% of the share capital of the Company upon such increase.

Up to 5% of the share capital could be allotted to EBRD through the exercise by EBRD of its option to convert its existing loan into Petrom shares.

Based on the Expression of Interest received, the Ministry of Economy and Commerce issued on October 3rd, 2003 the short-list of 11 bidders for Petrom from a list of 15. The 11 companies included: Occidental Oil and Gas, ConocoPhilips and Alon Inc of the US, Italy's ENI, OMV of Austria, Hungary's MOL, Poland's PKN Orlen, Russia's TNK-BP and Gazprom, Hellenic Petroleum of Greece and Switzerland's Glencore. During the process four companies (ConocoPhilips, TNK-BP, Alon and ENI) withdrew from the process and preliminary bids were submitted by the remaining seven players. Following investor due diligence, the final bids are expected on February 15, 2004, although according to sources from the industry the deadline for submitting of final bids will be extended by at least one month. The signing of the privatization contract is scheduled for end of March 2004, should no extension of the deadline for submitting the final bids occur.

Natural Gas Sector

Romania has the largest natural gas market in Central Europe and was one of the first countries to use gas for both residential and industrial purposes. The market penetration for natural gas reached high levels in the early 1980's due to a government policy driven to achieve self-sufficiency. One consequence of this policy was a sharp increase of domestic production leading to an accelerated depletion of the domestic natural gas reserves. The decline was further accentuated by the fact that no major discoveries of natural gas were made during last decade.

The share of natural gas within the domestic primary energy resources reached 41% in 2002 (or 35% if we consider total primary energy resources which includes also imports), bringing major advantages from an economic, social and environmental point of view.

Overview of Natural Gas Sector Restructuring Process

The natural gas sector has undergone significant changes since 1990, being subject to four restructuring initiatives so far.

The first restructuring was carried out in January 1991, when by GD the Natural Gas Holding ("Centrala Gaz Metan") was reorganized into the R.A. Romgaz Mediaș. According to the same decision, the two natural gas distribution operations were spun-off and headquartered in Bucharest and Târgu Mureș, while maintaining their old organizational structure. A natural gas distribution branch was created in each county, and these were subordinated to the two regional distribution companies.

By GD 491/1998, the regie autonome Romgaz Mediaș was transformed into the national corporation Romgaz Natural Gas National Company S.A. Mediaș. The distribution sector was separated in two joint stock companies namely Distrigaz Sud (Bucuresti) and Distrigaz Nord (Târgu Mureș) operating under the umbrella of the newly established S.N.G.N. Romgaz S.A.

The third restructuring happened in 2000 when by GD 334/2000 the national corporation Romgaz was restructured into five 100% state owned independent companies, based on their specific business: Exprogaz Mediaș (gas exploration and production), Depogaz Ploiești (underground storage), Transgaz Mediaș (gas transmission and transit) and Distrigaz Sud Bucharest and Distrigaz Nord Târgu-Mureș (natural gas supply and distribution). Following this restructuring, the two distribution companies preserved their old structure while becoming independent corporations operating in the natural gas market. In April 2001, the shares owned by SN Romgaz in Congaz Wirom Gas, Romexterra, Petrogas Services Romania and Black Sea LPG Romania were transferred to these companies by Government decision. In order to optimize the activities of the five companies in June 2001, by GD no. 575/2001 Exprogaz and Depogaz were merged into a single entity named S.N.G.N. Romgaz S.A., with operations in the exploration, production and underground storage areas.

Gas Market Liberalization

Starting August 1st, 2001, the initial degree of market opening the domestic natural gas market was set at 10% of total consumption, seventeen companies (whose combined consumption in 2000 reached 10% of the total demand) becoming eligible consumers. The market was further opened in 2002 to 25%, when a total number of 41 companies became eligible consumers. The combined consumption of the 41 companies was however 2.93 billion m^3 in 2001, corresponding to an effective market opening of 18.78%. According to ANRGN's decision No. 491/2002, a total of 45 eligible consumers were reconfirmed in 2002. The combined consumption of the 45 companies reached 3.375 billion m^3 in 2002, which corresponds to an actual market opening of 27%. For 2003 a number of 41 companies were reconfirmed as eligible consumers (4 licenses were withdrawn).

Overview of the Privatization

As part of the PSAL II program, the Romanian Government expressed its intention to privatize the two natural gas distribution companies. MIR – OPSPI has already appointed a CSFB-led Consortium as advisor for the privatization of Distrigaz North and Distrigaz South. The advisor will complete the due diligence process in 6 months, will propose and have approved a privatization strategy by the Government, followed by a 6 month period during which potential investors are expected to complete their own due diligence, negotiate the contract and eventually the winner to sign the privatization contract. It is expected that the whole process will be completed by early 2004. Following the deadline for submitting the expression of interest on January 14, 2004, five large European players submitted nine letters of intent as follows: Gazprom, E.ON - Ruhrgas, Gaz de France and Enel for both Distrigaz North and Distrigaz South and Wintershall for Distrigaz North. The employees of the companies will likely be allowed to acquire some 10% of the equity, but the payment mechanism is not yet clear.

The exploration, production and underground storage activities are still exclusively under state ownership. Romgaz is the main player in this sector, with SNP Petrom being active in natural gas production. The Romanian Government has already appointed a CSFB and ING led consortium to advise on the privatization of SNP Petrom and estimates that it will conclude a successful privatization by the end of March 2004. Regarding Romgaz, recent official statements indicate 2005 as the year in which a potential privatization of the Company will be considered. Romgaz could be of interest to German, Russian or Italian companies which intend to consolidate their production portfolio. As regards Transgaz, the company is considered of strategic importance by the Romanian Government and will not be privatized in the foreseeable future.

Exploration, Production and Underground Storage

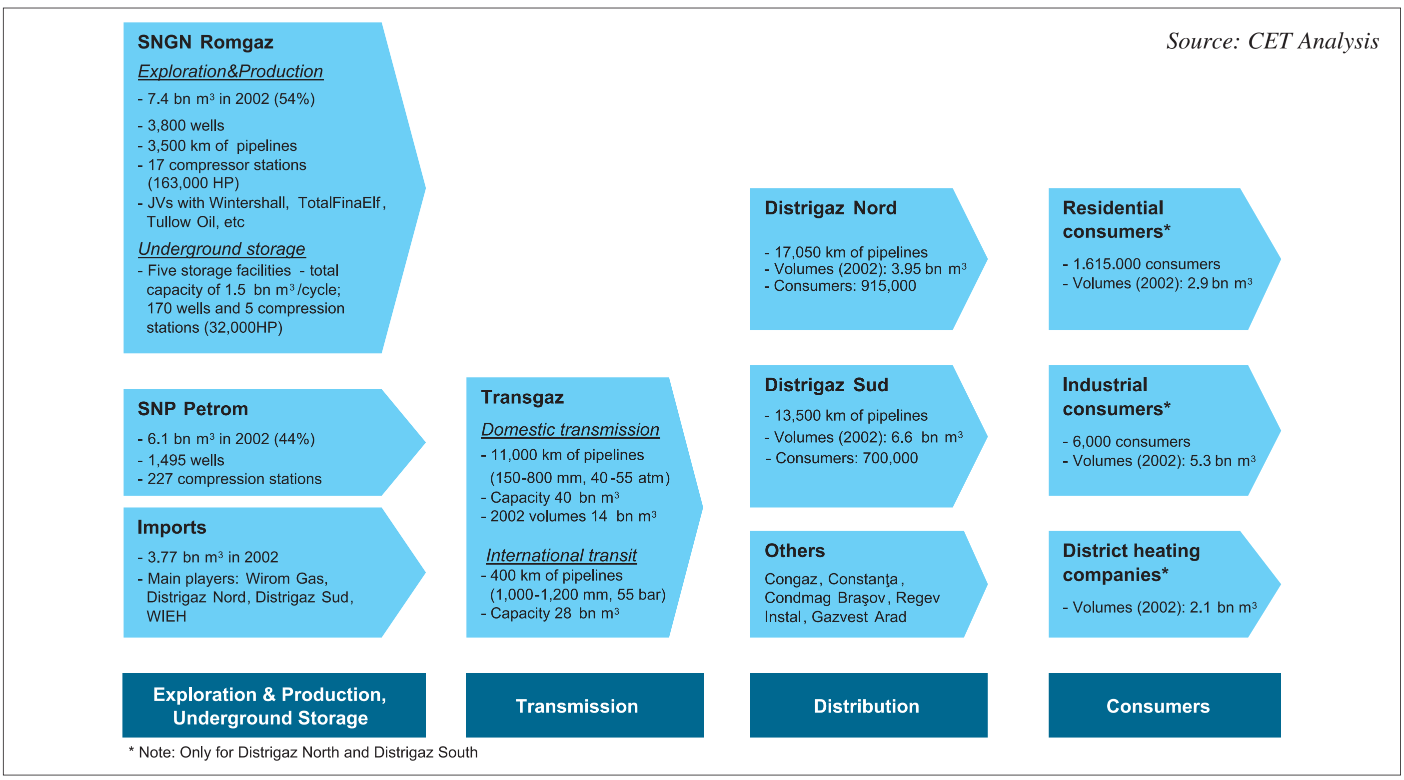
Over 90 years of operations, the Romanian natural gas industry has developed an extensive infrastructure, centered on the 140 natural gas sources discovered in the Transylvanian basin and the extra-Carpathian regions. The exploration, production and storage infrastructure is operated by Romgaz and consists of 3,800 wells, 3,500 km of collecting pipelines and 17 compressor stations with a total installed power of 163,000 HP. There are five underground storage facilities with a total capacity of 1.5 billion m^3 per cycle, consisting of 170 wells and five compression stations with a total installed power of 32,000 HP.

In 2002 Romgaz recorded a turnover of USD 250million, which is roughly flat in real terms as compared to previous year. At the beginning of 2003, the company recorded receivables of USD 139 million and payables of some USD 6.5 million. The largest debtors include Distrigaz South (USD 95 million) and Termoelectrica (USD 18 million).

In 2002, SNP Petrom produced approximately 45% (6.062 billion m^3) of domestic natural gas production. SNP Petrom principally produces gas in the Southern and Eastern parts of Romania, with 55% of production sourced in the Oltenia basin in the South. Some gas is produced from the Transylvania basin in the West and from the off-shore oil fields in the Black Sea. In total, SNP Petrom operates 1,495 gas producing wells and 227 compression stations. Their output consists mainly of well gas that is co-produced with crude oil. The gas from its crude oil wells is compressed and treated prior to being inserted in the distribution network.

Apart from Romgaz and SNP Petrom there are several other foreign companies that are currently undertaking exploration works. Although most of these JVs were unsuccessful so far, more recently Winthershall announced that it had found natural gas reserves in the Southern Transylvanian region, which is explored jointly with Romgaz. The reserve has an estimated capacity of 6 billion m^3 and Wintershall has invested USD 6.6 million so far. Following the failure of their exploration and production operations in the Black Sea, TotalFinaElf

Natural Gas Sector - Synthetic Overview



is also considering establishing a JV with Romgaz in order to carry out exploration works in the Oltenia, Eastern Muntenia and Northern Moldova areas. The cumulated investment in exploration works by foreign companies seeking natural gas deposits in Romania over the last 10 years amounts to some USD 125 million.

Depogaz currently operates 7 underground deposits with a total storage capacity of 2.012 billion m^3. As at September 2002, the total quantity of natural gas available in the storage facilities had reached 1.8 billion m^3. Romania intends to increase the underground natural gas storage capacity to 2.5 billion m^3 by 2003, 4.5 billion m^3 by 2004 and 7 billion m^3 by 2010. This would lead to full balancing of the demand and supply by 2010 for a projected consumption of 21 billion m^3 and a domestic production of 5 – 8 billion m^3.

Russian Gazprom has expressed serious investment intents to increase Romania's underground storage capacity and transit capacity to the South Eastern Europe (Bulgaria, Serbia, Turkey , Greece).

Transmission

Transgaz, a 100% state owned company, operates the national natural gas high pressure transmission system. The system consists of approximately 11,838 km of major transportation pipelines (with diameters ranging between 150-800 mm) and 758 pressure regulating/measurement stations. Most pipelines have a diameter over 500 mm and operate at pressures of 40-55 atm. The pipeline system has a transit capacity of over 40 billion m^3 per year. The estimated volume of gas carried in 2002 (both imports and local) is some 28 billion m^3. Transgaz operates two international transit pipelines with a total capacity of 28 billion m^3/yr. The first pipeline transports gas from the Russian Federation to Bulgaria through a 1,000-mm, 200 km pipeline with a nominal pressure of 55 bar. The second pipeline transports gas from the Russian Federation to Turkey and other Balkan countries through a 1,200 mm, 200 km pipeline with a nominal pressure of 55 bar.

Natural gas imports in Romania are currently handled by WIROM, a JV between Romgaz and German Wintershall (a BASF – Gazprom venture) which enjoyed a monopolistic position during recent years. Such monopoly will soon break following the creation of a direct importer from Gazprom (a newly created JV between Romgaz and Russian trader Gazexport).

Distribution

There is an increasing number of natural gas distributors in Romania, of which three state-owned (Distrigaz Nord and South and SNP Petrom) and several more private (Congaz Constanța, Condmag Brașov, Vitalgaz, Gazvest Arad, etc). Most of distribution infrastructure is operated by Distrigaz North and South and consists of over 20,000 km of pipelines, 6,700 km of joints and 4,124 natural pressure regulation stations. The two Companies service together some 908,975 consumers, of which 861,466 are residential.

Distrigaz Sud S.A. is a 100% state owned gas distribution company established by Government Decision No. 334/2000 through restructuring of the SNGN Romgaz Mediaș. The company is organized in 11 regional branches that include 21 counties in the southern part of Romania. The company distributes natural gas to approximately 625 localities. Distrigaz Sud operates an infrastructure of some 13,630 km of pipelines (of which 1,180 km are of polyethylene) and 2,079 gas regulating and metering stations. Natural gas volumes distributed in 2002 reached 5.1 billion m^3, down by 23% as compared to the previous year (6.61 billion m^3).

In 2002 Distrigaz Sud recorded a turnover of USD 427 million, up by 12% as compared with USD 374 million in 2001. At the end of March 2003, the company recorded receivables of USD 185 million and payables of USD 172 million. The largest debtor is Termoelectrica (USD 28 million), while the largest creditor is Romgaz (almost 50% of the payables).

The company had some 672,459 customers in 2002, up by 3% as compared to 2001. In 2001, out of the total volumes distributed, industrial consumers accounted for 3.7 billion m^3, residential consumers for 1.4 billion m^3 and district heating companies (including thermal power plants) accounted for 1.6 billion m^3. Bucharest accounts for a significant share of Distrigaz South's operations. The Bucharest network has some 3,120 km of pipelines which service some 151,200 customers (of which 134,000 private consumers, 10,000 tenants associations and 7,200 industrial consumers). However, the network is over 50 years old, and about 70% of the pipelines are out of their rated life.

The main priority of the Company consists of replacing the pipelines in the distribution network. According to Distrigaz's estimates, about 44% of the pipelines have overpassed their useful life and needs replacement. The new pipelines are of polyethylene which has a longer useful life as compared to steel pipes (40-45 years as compared to 10-15 years). In 2002 Distrigaz invested USD 32.3 million for replacement of some 510 km of pipelines. Of this about USD 19.8 million were financed out of Company's own resources (replacement of 228 km) with the balance of USD 12.5 million represented the portion of the WB loan (replacement of 260 km of pipelines). In 2001 Distrigaz Sud invested out of own sources some USD 18.5 million, up from USD 10.7 million in 2000. Of the total amount USD 13.8 million were spent on rehabilitation of 250 km of pipelines, USD 1.2 million for development of the distribution system and USD 2.7 million for equipment purchases. For 2003 Distrigaz has budgeted for pipeline replacement some USD 20 million (for replacement of 200 km of pipelines) and hopes to borrow an additional USD 15 – 20 million from foreign lenders in order to replace another 250 km.

Distrigaz Nord S.A. is a 100% state owned gas distribution company established by Government Decision No. 334/2000 through restructuring of the SNGN Romgaz Mediaș. The company operates a 12-branches structure and covers 20 counties in the northern part of the country (Transylvanian and Moldovian regions). The company distributes natural gas to approximately 702 communities. Distrigaz Nord has a distribution infrastructure consisting of 17,050 km of pipelines (of which 1,038 km of polyethylene) and 2,404 gas regulating and metering stations. Natural gas volumes recorded 3.95 billion m^3 in 2002, down 1.25% as compared to 2001 (4.01 billion m^3).

In 2002 Distrigaz Nord recorded a turnover of some USD 330 million and net profit of USD 12.8 million (as compared to USD 347 million and USD 4.7 million in 2001). At the end of February 2003, the Company recorded payables of USD 175 million, over 78% of this amount being owned by only 20 customers.

The company had some 915,000 customers in 2002. Out of the total gas volumes distributed in 2002, industrial consumers accounted for 48%, residential consumers for 38% and district heating companies (including thermal power plants) for 14% billion m^3.

The main investment priority of the company is the replacement of the old steel pipes with polyethylene pipes. In 2002 the Company invested USD 20m for replacement of some 354 km of pipelines with polyethylene pipelines. This amount is considerably higher than 2001, when the company spent on network replacement only USD 6.4. In 2003 the company has budgeted to invest some USD 20m out of own resources, of which 60% for replacement of 165 km of pipelines and 30% for expanding the distribution network (35 km).

Distrigaz North and Distrigaz South were launched for privatization in 2003 under the advisory of a CSFB-led consortium. The privatization strategy was approved by the end of October 2003 and provides for a combination of two privatisation methods comprising of a (i) sale of 30% of the shares through negotiation based on preliminary and non-binding bids and (ii) a share capital increase that will eventually allow a strategic investor to acquire 51% of the shareholding in any of the two natural gas distribution companies. Nine Expressions of Interest were submitted by January 14, 2004, all of them being qualified by the Ministry of Economy and Commerce – OPSPI to submit non-binding bids. The privatization contract is scheduled for signing at the end of March 2004.

On top of the large Distrigaz distributors, there are an increasing number of private operators, among which more noteworthy are presented bellow.

Congaz Constanța was established in 1998 and is a JV between Distrigaz Sud (28.6%), SNP Petrom (28.6%) and Ruhrgas (28.6%) that provides natural gas distribution services to the county of Constanța. It has some 2,600 customers, of which some 2,000 are residential.

Vitalgaz is a small private company founded in 1998 and active in natural gas and water concessions. In 2000, RPPF acquired a 72.4% stake in the company for EUR750k. Vitalgaz's gas operations are limited to certain localities around Bucharest (Vidra, Chiajna, Corbeanca), Brașov (Prejmer and Bran) and Târgoviște (Lunguleţu). The company is targeting to reach some 50,000 customers by end-2005 with an annual consumption of 24 million m^3. In 2003 RPPF has exited the investment to an US-based investment fund Pelagas

Gaz Vest is a small private gas distribution company established in 1999. In 2000, the European Environmental Investment Fund committed to invest up to EUR 3 million based on future development of the company. The company is building-out a 246-km natural gas distribution network and aims to connect localities in the Arad, Timiș and Bihor counties.

Institutional and Legal Framework

The regulatory framework in the gas distribution and supply sub-sector includes, as primary legislation, laws, Government decisions, Government ordinances and orders issued by the Ministry of Economy and Commerce (MEC). The secondary legislation consists in regulations issued by the National Natural Gas Regulatory Authority ('ANRGN'). ANRGN is the agency (under the supervision of the Government) in charge of regulating the natural gas industry. The main competencies of ANRGN refer to issuance / withdrawal of authorizations and licenses for companies operating in the natural gas sector (except the exploration and production sectors) and to establishment of criteria and methods for calculating prices and tariffs in the natural gas sector. Currently the end user price includes the gas price, transportation tariff, a percentage of the storage tariff and the distribution tariff, and is differentiated between captive customers, which supplies directly from the National Transport System and captive customers supplying from the distribution system. It is planned that between 2003-2007 the transmission tariffs will be differentiated based on transmission distance and volumes transported, and the storage tariffs will be differentiated based on specifics of each storage site. In addition, it is planned that in 2007 the price of the domestic natural gas will reach the level of imported natural gas.

Conclusions

After almost a decade of hesitant painful still continuous restructuring of the energy sector, the Romanian Government has finally committed to a fast-track privatization of the industry. This deep-reaching exercise is dramatically required by the new industrial structure of the country, as well as by the international financial institutions and Romania's sponsors (EU, WB, IMF).

The current and coming years (2004 - 2005) will witness the privatization of state-owned giants such as SNP Petrom, the twin natural gas distributors, as well as more than half of country's power distribution network. Such privatizations will be followed by the start-up of privatizing generating assets (Termoelectrica's lignite – fired thermal power plants, Hidroelectrica, etc). These are critical and visible steps aimed at convincing the global business community that Romania is a fully functional market economy, as well as at attracting significant foreign investment to the country. All this process will develop on the background of an accelerated NATO and EU convergence of Romania.

We strongly believe that the privatization of the Romanian energy sector will attract significant attention and will establish Romania as a preferred target for foreign investors during coming years.

Abbreviations:
TPP – Thermal Power Plant
CTPP – Cogeneration Thermal Power Plant
HPP – Hydropower Plant
NPP – Nuclear Power Plant
GD – Government Decision
MWt – Thermal MW
TSO – Transmission System Operator

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